

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2015/2015

DMA 5018 – MULTIMEDIA APPLICATIONS

(For Diploma Students Only)

12 OCTOBER 2015

2.30 p.m – 4.30 p.m

(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **5 (FIVE) pages** (excluding the cover page).
2. There are **3 (THREE) sections** in this Question paper.

Section A: Multiple Choice Question (20 marks)
Section B: Structured Questions (60 marks)
Section C: Essay Questions (20 marks)
3. For **Section A**, please mark all your answers in the **OMR sheet** provided.
4. For **Section B**, answer **ALL** questions. Please write all your answers in the **Answer Booklet** provided.
5. For **Section C**, answer **ONE** question only. Please write all your answers in the **Answer Booklet** provided.

8. There are three elements that can vary in project estimates, which are:
- A. Age, money and time
 - B. Time, money and people
 - C. Computer, domain and people
 - D. Skill, money and domain
9. Which of the following statement is **TRUE** about alpha testing?
- A. Usually called the gold master.
 - B. Testers should be the representative of real users.
 - C. Usually done in house by team members
 - D. Testers should be people who were not involved with the actual production.
10. Markup such as `<big>` and `</big>` or `<ol>` and `</ol>` are example of HTML_____.
- A. links
 - B. modules
 - C. tags
 - D. serif
11. What is the process called by which the color value of each pixel is changed to the closest matching color value in the target palette?
- A. Extruding
 - B. Dithering
 - C. Saturating
 - D. Rendering
12. The following statements are **TRUE** about bitmap sources **EXCEPT**:
- A. Capture a bitmap using a camera.
 - B. Capture a bitmap from a photo or other artwork using a scanner to digitize the image.
 - C. Grab a bitmap from an active computer screen with a screen capture program, and then paste in into a paint program or your application.
 - D. Draw a 3D model using Autodesk 3Ds Max software.
13. The technical limitation you are likely to encounter in creating animations is:
- A. the monitor's refresh rate.
 - B. the persistence of vision phenomena.
 - C. the computer's processing capability .
 - D. the ability to accurately calculate physical actions.
14. What is the main difference between 2D and 3D animation?
- A. The number of tweens.
 - B. The number of keyframes.
 - C. The number of frames per second.
 - D. The number of axes on which the motion occurs.

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15. In Macintosh, digitized sounds are usually stored as what kind of file format?
- A. WAV
 - B. AIFF
 - C. MPEG-4
 - D. PICT
16. The following statements **TRUE** about MIDI sound **EXCEPT**:
- A. Working with MIDI do not requires knowledge of music theory.
 - B. MIDI files are much smaller than digitized audio.
 - C. MIDI does not have consistent playback quality, while digital audio provides consistent playback quality.
 - D. MIDI files sound better than digital audio files when played on a high-quality MIDI device.
17. The algorithm used to compress a video for delivery and then decode the compressed video in real time for fast playback is called _____.
- A. tracking
 - B. chroma
 - C. codecs
 - D. progressive
18. Which of the following is **NOT** a good idea when creating titles to be used in video?
- A. Fonts for titles should be plain, serif, and bold enough to be easily read.
 - B. Use a drop shadow to help separate the text from the background image.
 - C. Avoid colors like bright reds and magenta that are too hot, they might twinkle and buzz.
 - D. When you are laying text onto a dark background, use white or a light color for the text.
19. Which of the following is **NOT** an option for a multimedia developer to do in order to work within the constraints of bandwidth bottlenecks?
- A. Compress data into ZIP file before transmitting.
 - B. Design alternate low-bandwidth and high-bandwidth navigation paths to accommodate all users.
 - C. Allow users to download data repeatedly.
 - D. Implement streaming methods that allow data to be transferred and displayed incrementally as it comes in.
20. The following statements are **TRUE** in determining which graphic formats are best suited for different types of images **EXCEPT**:
- A. Use GIF files for line art and images that contain large areas of the same color, and use PNG for photorealistic images.
 - B. Image format GIF, PNG, and JPEG use built-in compression algorithms to reduce file size.
 - C. The GIF89a and PNG specifications allow for transparency, while JPEG do not allow transparency.
 - D. GIF and PNG images are limited to 8 bits of color depth, while JPEG images may contain 24 bits of color depth.

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Section B: Structured Questions (60 marks)

Instruction: Answer ALL questions. Please write all your answers in the Answer Booklet provided.

Question 1 (15 Marks)

- a) State **FIVE** graphical approaches to avoid when designing a multimedia project. (5 marks)
- b) Discuss **FIVE** features of authoring tools. (10 marks)

Question 2 (15 Marks)

- a) List **FIVE** classifications of testing costs. (5 marks)
- b) Explain **FIVE** contents that should be included in multimedia bid proposal. (10 marks)

Question 3 (15 Marks)

- a) What is file compression? Give **ONE** example of an image file format using lossy and lossless compression algorithm. (4 marks)
- b) Explain how vector-drawn images work. (6 marks)
- c) Calculate the file size in Kilobytes for a 10 second recording at 20.05 KHz, 8-bit resolution monophonic sound. (5 marks)

Question 4 (15 Marks)

- a) Describe **TWO** characteristics of MPEG-4 that make it the ideal standard for streaming rich media over the Internet. (4 marks)
- b) Explain **THREE** tips for designing an effective multimedia for the Web. (6 marks)
- c) Briefly explain how the internetworking works that enables you to type *www.mmls.edu.my* into a browser and have the requested web page displayed on your personal computer. (5 marks)

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Section C: Essay Questions (20 marks)

Instruction: Answer ONE question only. Please write your answers in the Answer Booklet provided.

Question 1 (20 Marks)

As an experienced project manager, you are aware that you are the person who has the overall responsibility for the project. Discuss **FIVE** responsibilities of a project manager. In order to become a successful leader, a project manager needs to have certain skills. Elaborate **FIVE** skills that can ensure a project manager to succeed in conducting a project from beginning to the end.

Question 2 (20 Marks)

You are participating in developing a 3D animation short movie for Digital and Creative Content Competition. You are assigned as the project leader for a project. In order to enter this competition, you are required to write a portfolio report that contains:

- i. **TWO** examples of 3D animation software that you might use for the project.
(2 marks)
- ii. **THREE** features of a 3D animation software that you could use to create 3D animation.
(6 marks)
- iii. **FIVE** basic sound editing operations and functions for each operation.
(10 marks)
- iv. **TWO** crucial aspects of preparing digital audio files for your project.
(2 marks)

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